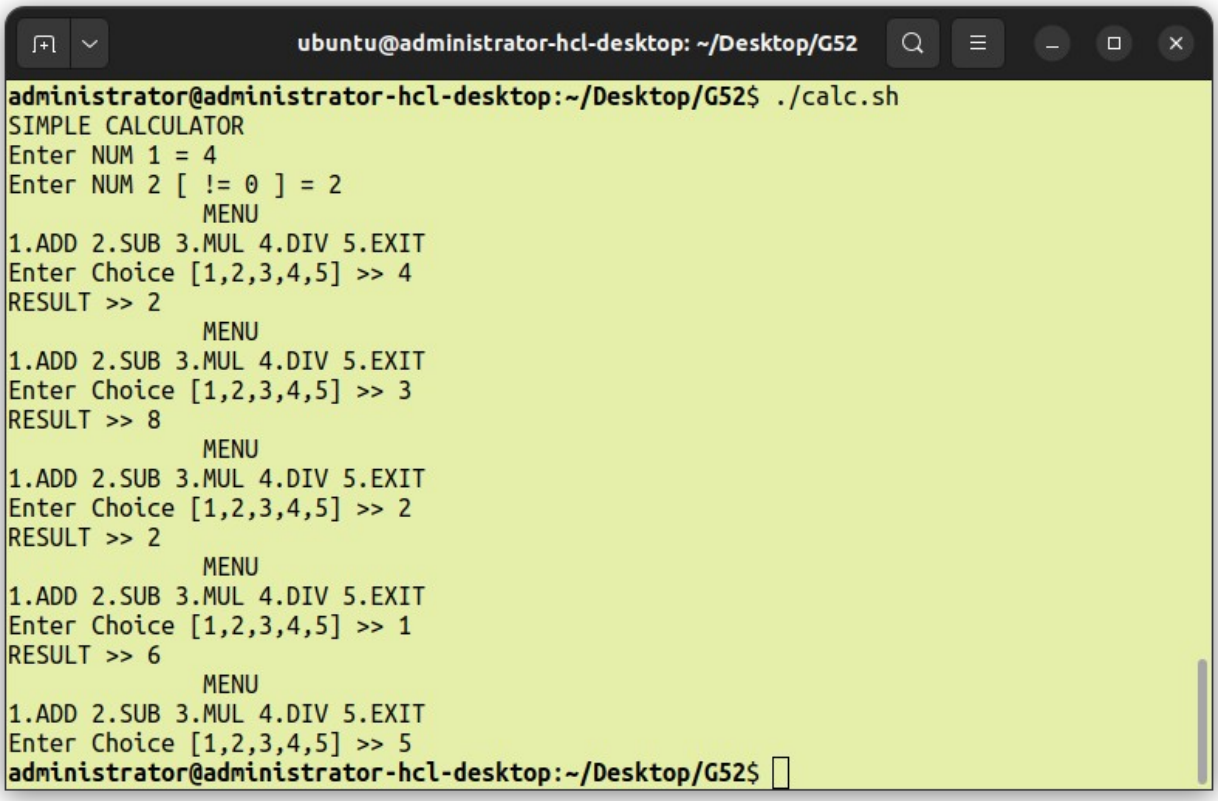
GOPIKRISHNA V
S4 CSE A
52

FACTORIAL

```
echo "FACTORIAL OF 'n'"

echo -n "Enter 'n' >> "
read n

fact=1
z=0

if [ $n == $z ] ; then
        echo "FACTORIAL OF 0 >> 1"
else
        for((i=2;i<=n;i++))
        do
                fact=$((fact*i))
        done
fi

echo -n "FACTORIAL OF '$n' >> $fact"

echo
```

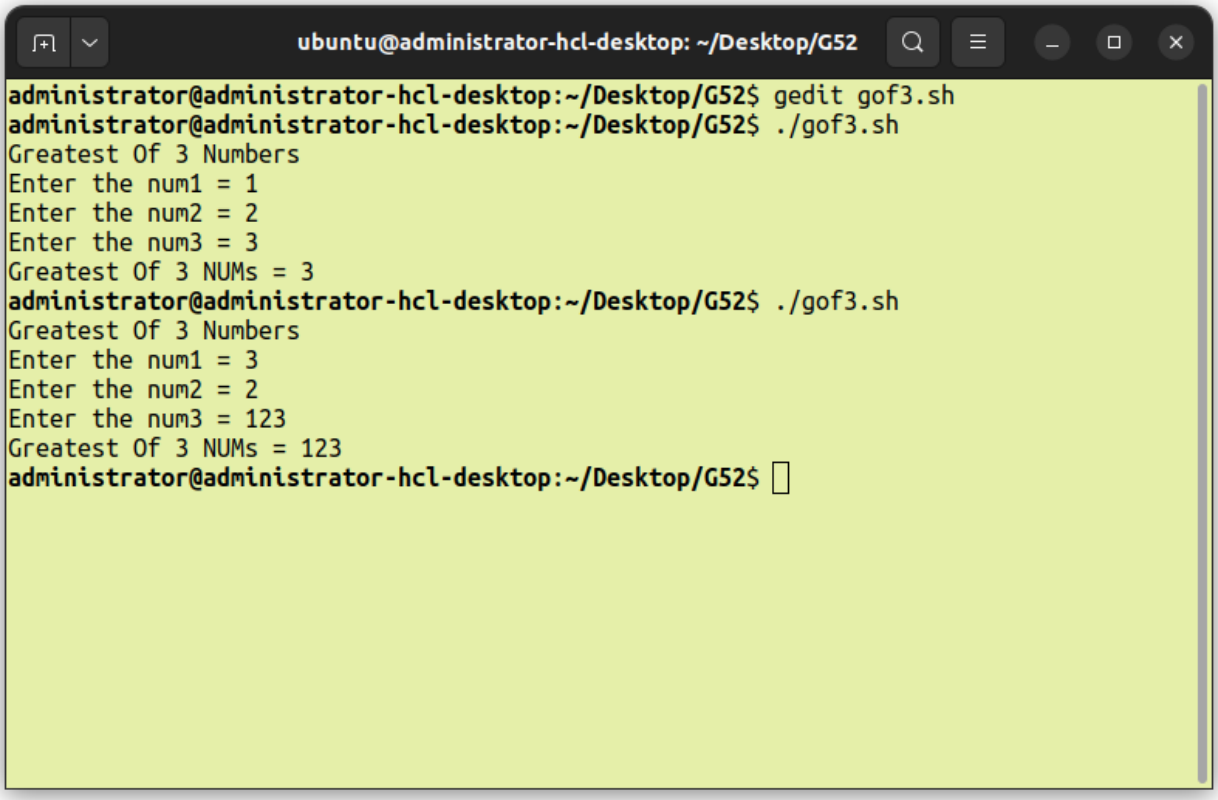
SIMPLE CALCULATOR

```
echo "SIMPLE CALCULATOR"
echo -n "Enter NUM 1 = "
read num1
echo -n "Enter NUM 2 [ != 0 ] = "
read num2

ch=0

while [ $ch != 5 ] ;
do
   echo "            MENU"
   echo $"1.ADD 2.SUB 3.MUL 4.DIV 5.EXIT"
   echo -n "Enter Choice [1,2,3,4,5] >> "
   read ch

   if [ $ch == 1 ] ;
   then
      result=$((num1+num2))
      echo "RESULT >> $result"
   fi

   if [ $ch == 2 ] ;
   then
      result=$((num1-num2))
      echo "RESULT >> $result"
   fi

   if [ $ch == 3 ] ;
   then
      result=$((num1*num2))
      echo "RESULT >> $result"
   fi

   if [ $ch == 4 ] ;
   then
      result=$((num1/num2))
      echo "RESULT >> $result"
   fi

done
```


ubuntu@administrator-hcl-desktop: ~/Desktop/G52
administrator@administrator-hcl-desktop:~/Desktop/G52$ ./calc.sh
SIMPLE CALCULATOR
Enter NUM 1 = 4
Enter NUM 2 [!= 0] = 2
MENU
1.ADD 2.SUB 3.MUL 4.DIV 5.EXIT
Enter Choice [1,2,3,4,5] >> 4
RESULT >> 2
MENU
1.ADD 2.SUB 3.MUL 4.DIV 5.EXIT
Enter Choice [1,2,3,4,5] >> 3
RESULT >> 8
MENU
1.ADD 2.SUB 3.MUL 4.DIV 5.EXIT
Enter Choice [1,2,3,4,5] >> 2
RESULT >> 2
MENU
1.ADD 2.SUB 3.MUL 4.DIV 5.EXIT
Enter Choice [1,2,3,4,5] >> 1
RESULT >> 6
MENU
1.ADD 2.SUB 3.MUL 4.DIV 5.EXIT
Enter Choice [1,2,3,4,5] >> 5
administrator@administrator-hcl-desktop:~/Desktop/G52$

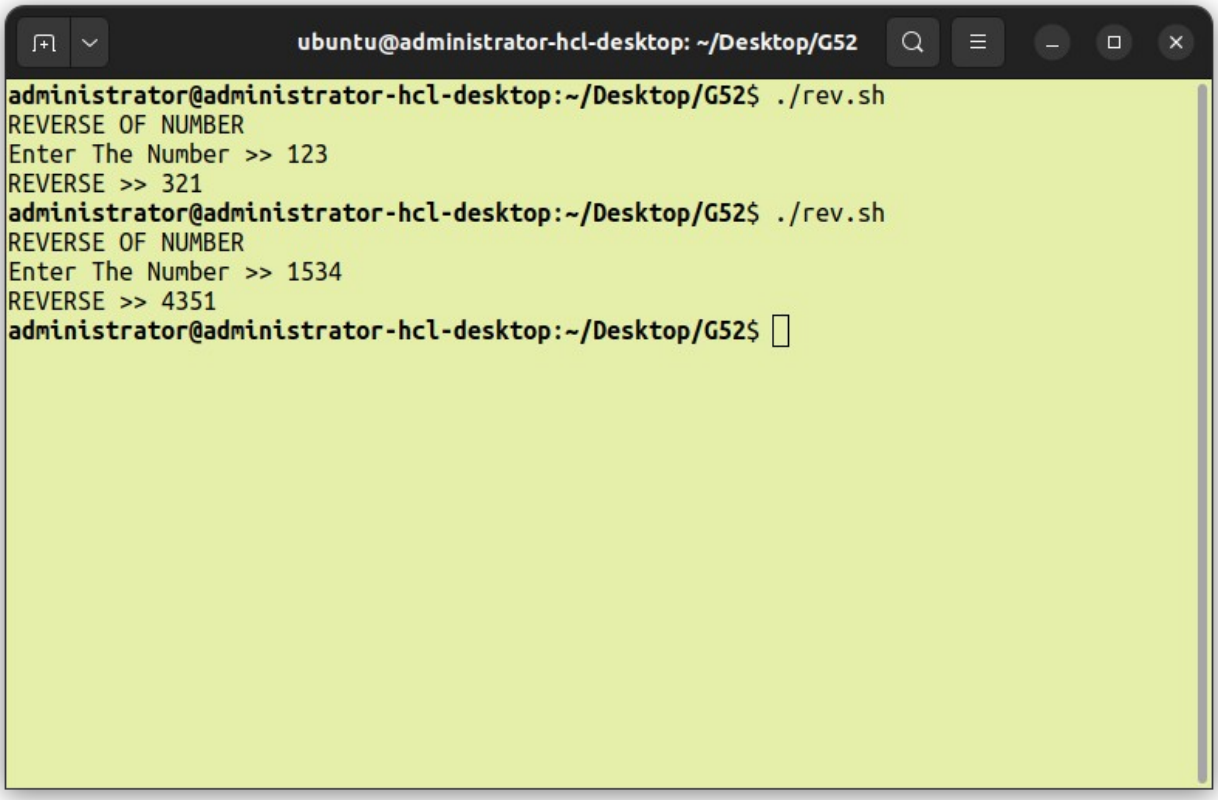
GREATEST OF 3 NUMBERS

```
echo "Greatest Of 3 Numbers"

echo -n "Enter the num1 = "
read num1
echo -n "Enter the num2 = "
read num2
echo -n "Enter the num3 = "
read num3

if [ $num1 -gt $num2 ] && [ $num1 -gt $num3 ]
then
   echo "Greatest Of 3 NUMs = $num1"
elif [ $num2 -gt $num3 ] ;
then
   echo "Greatest Of 3 NUMs = $num2"
else
   echo "Greatest Of 3 NUMs = $num3"
fi
```



REVERSE OF A NUMBER

```
echo "REVERSE OF NUMBER"

echo -n "Enter The Number >> "
read n

while [ $n -ne 0 ] ;
do
        rem=$((n%10))
        rev=$(( (rev*10)+rem ))
        n=$((n/10))
done

echo "REVERSE >> $rev"
```



FIBONACCI SERIES

```
echo "FIBONACCI SERIES"

n1=0
n2=1
n3=$((n1+n2))

echo -n "Enter Limit >> "
read lim

echo -n "FIBONACCI SERIES upto $lim >> "
echo -n "$n1 $n2"
for (( i=3 ; i <= lim ; ++i ))
do
        echo -n " $n3"
        n1=$n2
        n2=$n3
        n3=$((n1+n2))
done

echo
```